

Translation

PATENT COOPERATION TREATY

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PCT/EP2003/005100



PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference P 2796/PCT B/S	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/EP2003/005100	International filing date (day/month/year) 15 May 2003 (15.05.2003)	Priority date (day/month/year) 03 July 2002 (03.07.2002)
International Patent Classification (IPC) or national classification and IPC F16H 57/02		
Applicant WITTENSTEIN AG		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 6 sheets, including this cover sheet.

☒ This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of 6 sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

Date of submission of the demand 02 February 2004 (02.02.2004)	Date of completion of this report 18 November 2004 (18.11.2004)
Name and mailing address of the IPEA/EP	Authorized officer
Facsimile No.	Telephone No.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/EP2003/005100

I. Basis of the report

1. With regard to the elements of the international application:*

- ☐ the international application as originally filed
- ☒ the description:
 pages 1, 3-16, as originally filed
 pages _____, filed with the demand
 pages 2, 2a, filed with the letter of 27 October 2004 (27.10.2004)
- ☒ the claims:
 pages _____, as originally filed
 pages _____, as amended (together with any statement under Article 19
 pages _____, filed with the demand
 pages 1-14, filed with the letter of 11 November 2004 (11.11.2004)
- ☒ the drawings:
 pages 1/5-5/5, as originally filed
 pages _____, filed with the demand
 pages _____, filed with the letter of _____
- ☐ the sequence listing part of the description:
 pages _____, as originally filed
 pages _____, filed with the demand
 pages _____, filed with the letter of _____

2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language _____ which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets/fig _____

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**

* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rule 70.16 and 70.17).

** Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.
PCT/EP 03/05100

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	1-14	YES
	Claims		NO
Inventive step (IS)	Claims	5, 10-14	YES
	Claims	1-4, 6-9	NO
Industrial applicability (IA)	Claims	1-14	YES
	Claims		NO

2. Citations and explanations

Prior art cited in the search report:

- D1: PATENT ABSTRACTS OF JAPAN Vol. 2000, No. 07, 29
September 2000 & JP 2000 110895 A (SUMITOMO HEAVY IND LTD), 18 April 2000
- D2: EP-A-0 957 291 (HARMONIC DRIVE SYSTEMS) 17 November 1999
- D3: PATENT ABSTRACTS OF JAPAN Vol. 018, No. 628 (M-1713),
30 November 1994 & JP 06 241284 A (SUMITOMO HEAVY IND LTD), 30 August 1994
- D4: DE 26 49 949 A (SIEBENHAAR GETRIEBE) 3 November 1977

1. New independent claims 1 and 2 - Lack of clarity

The subject matter of the newly submitted claims 1 and 2 does not satisfy the requirements of PCT Article 6 because it is not clear. The characterizing parts of the claims contain *inter alia* the features

a) different assemblies of one unit with another unit

b) the same gear can be assembled with SP kinematics or TP kinematics to produce a gear with variably selectable transmission ratios.

Expressions a) and b) in claim 1 are vague and unclear and leave the reader uncertain as to the meaning of the technical features in question. As a result, the subject matter of said claim is not clearly defined (PCT Article 6).

2. Independent claim 1

As the applicant mentions in the letter of 5 July 2004, document D4 is considered the prior art closest to the subject matter of claim 1. It discloses, in accordance with the features of claim 1 as they are understood by this authority:

a system for producing gears consisting of different subassemblies, wherein the same gear can be put together with SP kinematics or TP kinematics through different assemblies of unit (3) with units (2) and (1) to produce a gear with variably selectable transmission ratios.

The subject matter of claim 1 differs therefrom merely by the following features:

- the internal gear (20) of the power train (Han) being attached to the universal planet carrier (9) of the hollow shaft wheel (Hab) in a rotationally rigid manner, in particular screwed on, in order to make the gear into a two-stage TP gear.

The problem to be solved by the present invention can thus be seen as that of creating a system that can be employed universally.

However, the above features have already been used for the same purpose in a similar system (cf. document D2, figure 1).

If a person skilled in the art wished to achieve the same aim, he could easily apply these features to like effect to a system according to document D4. In this way he would arrive at a universally employable system as per claim 1 without thereby exercising inventive skill.

Therefore, the subject matter of claim 1 does not involve an inventive step (PCT Article 33(3)).

3. Independent claim 2

As the applicant mentions in the letter of 5 July 2004, document D4 is considered the prior art closest to the subject matter of claim 1. It discloses, in accordance with the features of claim 1 as they are understood by this authority:

a system for producing gears consisting of different subassemblies, wherein the same gear can be put together with SP kinematics or TP kinematics through different assemblies of unit (3) with units (2) and (1) to produce a gear with variably selectable transmission ratios.

The subject matter of claim 2 differs therefrom merely by the following features:

- the internal gear (20) of the power train (Han) being rigidly attached to, in particular screwed onto, the housing (3) of the attachment part (A2), in order to make the gear into a two-stage SP gear.

The problem to be solved by the present invention can thus be seen as that of creating a system that can be employed universally.

However, the above features have already been used for the same purpose in a similar system (cf. document D1, figure 1).

If a person skilled in the art wished to achieve the same aim, he could easily apply these features to like effect to a system according to document D4. In this way he would arrive at a universally employable system as per claim 2 without thereby exercising inventive skill.

Therefore, the subject matter of claim 2 does not involve an inventive step (PCT Article 33(3)).

4. Claims 3-14, dependent upon claim 1

The subject matter of dependent claims 3-14 relates to further embodiments of the invention according to claim 1 and these claims likewise fail to satisfy the PCT requirements, since the claim upon which they are dependent must also satisfy said requirements. Moreover, features of the claims listed below appear to be known *per se* from the documents indicated. They therefore do not contain any essential features that could in any way substantiate an inventive step:

- claims 3, 4 and 6-8: document D1
- claim 9: document D2.